

AMENDMENTS TO THE CLAIMS

Claims 1 - 9. (Canceled)

10. (Currently amended) A security thread comprising:

a core member selectively having either -

a) a fiber made of a soft magnetic material having permeability of 1000 or more, or

b) a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread bundled with the fiber coextensive therewith; and

a cover member made of a nonmetal material contacting and covering said core member;
whereby said security thread forms a loop in use.

11. (Currently Amended) A security thread comprising:

a core member selectively having either -

a) a fiber made of a soft magnetic material having permeability of 1000 or more, or

b) a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread bundled with the fiber coextensive therewith;

a member bundled with said core member and coextensive therewith and made of a semi-hard magnetic material which can deactivate a magnetic characteristic of the soft magnetic material; and

a cover member made of a nonmetal material covering said core member and said member made of said semi-hard magnetic material in such a manner that said cover member is in

contact with either or both of said core member and said member made of said semi-hard magnetic material;

whereby said security thread forms a loop in use.

12. (Currently Amended) A security thread comprising:

a core member selectively having either -

a) a fiber made of a soft magnetic material having permeability of 1000 or more, or

b) a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread bundled with the fiber coextensive therewith;

a thermal welding thread bundled with said core member coextensive therewith; and

a cover member made of a nonmetal material covering said core member and said thermal welding thread in such a manner that said cover member is in contact with either or both of said core member and said thermal welding thread;

whereby said security thread forms a loop in use.

13. (Currently Amended) A security thread comprising:

a core member selectively having either -

a) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal, or

b) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal and a core thread bundled with the fiber and coextensive therewith; and

a cover member made of a nonmetal material contacting and covering said core member;
whereby said security thread forms a loop in use.

14. (Currently Amended) A security thread comprising:

a core member selectively having either –

a) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal, or

b) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal and a core thread bundled with the fiber and coextensive therewith;

a member bundled with said core member and coextensive therewith and made of a semi-hard magnetic material which can deactivate the magnetic characteristic of the soft magnetic material; and

a cover member made of a nonmetal material contacting and covering said core member;
whereby said security thread forms a loop in use.

15. (Currently Amended) A security thread comprising:

a core member selectively having either –

a) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal, or

b) a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal and a core thread bundled with the fiber and coextensive therewith;

a member bundled with said core member and coextensive therewith and made of a semi-hard magnetic material which can deactivate the magnetic characteristic of the soft magnetic material;

a thermal welding thread bundled with said core member and coextensive therewith; and

a cover member made of a nonmetal material contacting and covering said core member and said thermal thread;

whereby said security thread forms a loop in use.

16. (Previously Presented) The security thread according to any one of claims 10 to 15 wherein said soft magnetic material is made of an amorphous metal.

17. (Previously Presented) The security thread according to claim 16, wherein said amorphous metal is mainly made of Co-Fe-Si-B.

18. (Previously Presented) The security thread according to any one of claims 10 to 15 wherein said soft magnetic material is made of an amorphous metal ribbon.

19. (Previously Presented) The security thread according to claim 18, wherein said amorphous metal ribbon is mainly made of Co-Fe-Si-B.

20. (Currently Amended) The security thread according to any one of claims 10 to 15 wherein said soft magnetic material is made of a Ni-Fe alloy known as permeability alloy.

21. (Previously Presented) The security thread according to any one of claims 10 to 15 wherein said soft magnetic material is made of an Fe-Si based alloy.

22. (Currently Amended) A manufacturing method of a security thread comprising the steps of:

preparing a core member having a fiber made of a soft magnetic material having permeability of 1000 or more, or a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread by bundling the same with the fiber coextensively therewith;

covering a periphery of said core member by a cover member made of a nonmetal material so that said periphery is surrounded by said cover member and is not exposed; and

deforming said security thread so that said security thread forms a loop in use.

23. (Currently Amended) A manufacturing method of a security thread comprising the steps of:

preparing a core member having a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization

reversal, or a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal and a core thread by bundling the same with the fiber coextensively therewith;

covering a periphery of said core member by a cover member made of a nonmetal material so that said periphery is surrounded by said cover member and is not exposed; and
deforming said security thread so that said security thread forms a loop in use.

24. (Currently Amended) A manufacturing method of a security thread comprising the steps of:

preparing a core member having a fiber made of a soft magnetic material having permeability of 1000 or more, or a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread by bundling the same with the fiber coextensively therewith;

disposing a member to be in contact with said core member and made of a semi-hard magnetic material which can deactivate a magnetic characteristic of the soft magnetic material;

covering a periphery of said core member and a periphery of said member made of said semi-hard magnetic material by a cover member made of a nonmetal material so that said both peripheries are surrounded by said cover member, and said both peripheries are not exposed; and
deforming said security thread so that said security thread forms a loop in use.

25. (Currently Amended) A manufacturing method of a security thread comprising the steps of:

preparing a core member having a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization

reversal, or a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal and a core thread;

disposing a member to be in contact with said core member and made of a semi-hard magnetic material which can deactivate the magnetic characteristic of the soft magnetic material;

covering a periphery of said core member and a periphery of said member made of said semi-hard magnetic material by a cover member made of a nonmetal material so that said both peripheries are not exposed; and

deforming said security thread so that said security thread forms a loop in use.

26. (Previously Presented) A manufacturing method of a security thread comprising the steps of:

preparing a core member having fiber made of a soft magnetic material permeability of 1000 or more, or a fiber made of a soft magnetic material having permeability of 1000 or more and a core thread;

disposing a thermal welding thread to be in contact with said core member; and

covering a periphery of said core member and said thermal welding thread by a cover member made of a nonmetal material.

27. (Previously Presented) A manufacturing method of a security thread comprising the steps of:

preparing a core member having a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reversal, or a fiber made of a soft magnetic material indicating a magnetic characteristic with a large Barkhausen discontinuity to rapidly cause magnetization reverse and a core thread;

disposing a thermal welding thread to be in contact with said core member; and

covering a periphery of said core member and said thermal welding thread
by a cover member made of a nonmetal material.